



Wide Area Network (WAN) Management Fee

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Board of Directors Meeting
October 18, 2011

Agenda

- **Provide background information on Market Participant direct WAN connectivity**
 - Nature & Purpose
 - Current ERCOT billing practices
- **Discuss proposed changes to billing practices**
 - Overview of cost components
 - New proposal development methodology
 - Change impact overview

Background

- **Network Connectivity to Market Participants (MPs)**
 - Direct WAN connectivity to over 100 MP sites, offering QSEs and TDSPs an effective, reliable path to transact with ERCOT
 - This connectivity, mandatory for Level 3 & 4 QSEs and TSPs, is separate and distinct from Internet connectivity
 - It is provided as a managed service through a highly available network comprised of two diverse carriers
 - Voice Services (including Hotline) and Data Services (diverse application portfolio, details in appendix on page 9)
- **Current Billing Practices**
 - MPs are only billed for services that are directly attributable to each of them, including regulatory charges and taxes
 - These costs can vary significantly based on distance to MP's site and bandwidth requirements
 - ERCOT absorbs the balance of all other costs, e.g. support personnel costs and 3rd party expenses related to shared network components
 - These unbilled expenses are currently funded out of the System Administration Fee
 - 2012 budget is predicated on a shift of these absorbed costs to the MPs who use this service

Cost Components – Monthly Average from 10/2010 to 3/2011

- **Expenses currently billed to MPs**

- Network carrier costs \$172,500

- **Expenses absorbed by ERCOT**

- Network carrier costs 23,000 [1]

- 3rd Party Network management 2,500

- ERCOT labor (installations & support) 27,100 [2]

- Sub-Total \$ 52,600

- **\$52,600, the overhead that ERCOT currently absorbs, represents a 30% increase over of the total amount billed out to Market Participants**

[1] These costs are trending higher as additional bandwidth is deployed to support additional MPs, which places additional risk on ERCOT's operating budget

[2] Estimate based on a flat rate of \$67/hour including overhead

New Proposal Development Methodology

- **Identified telecom costs not currently billed to MPs**
- **Eliminated those costs that are broadly consumed, e.g Internet or Webex conferencing**
- **Consulted with Legal, Client Services, Accounting, Credit, Treasury, and Finance departments on task analysis and costs**
- **Performed task analysis for MP activation and ongoing support (see sample on page 11)**
- **Developed a one-time activation fee**
- **Defined a cost allocation method for ongoing support after evaluating four alternatives (see page 10)**
- **Benchmarked our approach with other ISOs**
- **Consulted with Internal Audit on final recommendation**

Impact Overview – One-Time and Recurring Costs

- **Activation Fee for Connectivity Requests**
 - \$6,000 in addition to vendor supplied equipment & services
- **Monthly allocation of ERCOT internal support labor and currently unbilled vendor costs**
 - Estimated between \$390 and \$590 per month per connection

Connectivity	Current Average Monthly WAN Invoice	WAN Management Fee Cost Components				Estimated Additional Monthly Fee	Increase Over Previous Invoice (%)	New Estimated Average Monthly WAN
		AT&T Core Network	Sprint Core Network	Sprint Network Management	ERCOT Labor			
Voice Only								
In-State	750	100		25	265	390	52.0%	1140
Out-of-State	1500	100		25	265	390	26.0%	1890
Full Site								
In-State	1800	100	200	25	265	590	32.8%	2390
Out-of-State	2500	100	200	25	265	590	23.6%	3090

Recommendations and Next Steps

- **Recommendations**

- Bill MPs a one-time \$6,000 fee at time of on-boarding for all related project costs
- Allocate unbilled ongoing costs (internal labor and vendor costs) per our recommended methodology

- **Next Steps**

- Obtain Board approval
- Communicate to the market
- Modify, as necessary, any Market Participant WAN Agreements
- Initiate new billing practice in January 2012

Appendices

Data Services Delivered Over ERCOT WAN to MPs

Service Name	Availability	Summary of Service
Market Operation System Document Type Definition (MOSDTD)	WAN Only	Application Programmable Interface (API) definitions for Market Operation System (MOS) website
Market Operation System Public (MOSPUBLIC)	Internet Only	Website for public data from the Market Operations System
Market Operation System Texas Market Link (MOSTML)	WAN/Internet	Website for Market Participant specific data, including bids and schedule submissions. Provides Market Participants the ability to query schedule data.
MIS Market Information Service	WAN/Internet	Proxy website for many of the ERCOT services
PI	WAN/Internet	Website for reports, ESIID lookups
Texas Market Link Retail (TMLRETAIL)	WAN/Internet	Website supplying Black Start and 'Reliability Must Run' (RMR) data to Market Participants
ESERVICE	WAN Only	Website for requesting services and submitting disputes
Market Information Service Application Programmable Interface (MISAPI)	WAN/Internet	Nodal website for Market Participants to submit bids and schedules, as well as query data and reports
Texas Market Link (TML)	WAN/Internet	Texas Market Link (Portal) Website for providing Market Participants a central location for all Zonal data
Inter Control Center Protocol (ICCP)	WAN Only	Real Time Grid monitoring and Frequency Control
Market Operation System (MOS)	WAN Only	Website for Market Participants to submit bids and schedules, as well as query schedule data

Ongoing Cost Allocation Alternatives Considered

Option 1 (ERCOT recommendation)

- Evenly distribute AT&T costs to all MPs
- Distribute Sprint WAN costs to only MPs with MPLS connections
- Evenly distribute ERCOT equipment management/maintenance costs to all MPs
- Evenly distribute ERCOT personnel costs to all MPs
- Most fair alternative considered

Option 2

- Evenly distribute costs across all MPs for all services
- Unfairly burdens certain MPs with limited use of WAN services

Option 3

- Distribute cost based on percentage of spend as it relates to WAN fees
- Unfairly burdens certain MPs with extended long-haul costs

Option 4

- Bill a flat rate to Market based on projections from previous year
- Unfairly burdens certain MPs with limited use of WAN services
- May not accurately reflect actual costs

ERCOT support required for activating a new MP

Billing MPs who join the ERCOT WAN an “activation fee” that includes time spent:

- Initial discussion with MP and Client Relations
- Preparing estimates
- Ordering circuits and managing installation
- Ordering equipment
- Scheduling and coordinating equipment installation
- Consulting with MP on technical issues
- System Operations discussions and turret configuration
- ERCOT core site networking equipment configuration
- Connectivity Testing
- Qualification
- Database loads
- Planning
- Studies
- MP Control Room consultation
- Updating ERCOT documentation with MP information
- Setting up account for MP in accounts receivable system